TEST REPORT

ROOF MOISTURE SURVEY

Test Protocol TAS 126-95

Florida Building Code 2014

Date: **April 15, 2016**

ACRC #: **16-0172 MSELD**

Pages: **1 - 5**

Report Prepared For:
Advanced Roofing
1950 NW 22nd Street
Ft. Lauderdale, FL

Project Name: **Palm Beach Shores Condo.**

Address: **33 S. Ocean Avenue**

City / State: **Palm Beach Shores, FL**

Deck: **East Lower Deck**

TESTING LABORATORY

Atlantic & Caribbean Roof Consulting

TESTING & ENGINEERING SERVICES

1839 NW 29th Street
Oakland Park, Fl 33311

PHONE: (954) 742-9515
FAX: (954) 742-9513
EMAIL: ESMAUSE@ROOFCONSULTANT.NET

MIAMI-DADE TESTING LABORATORY
CERTIFICATION #15-0224.01

FLORIDA ENGINEERING FIRM
CERTIFICATE OF AUTHORIZATION #9036

TAS 126

BUILDING/ROOF SYSTEM INFORMATION

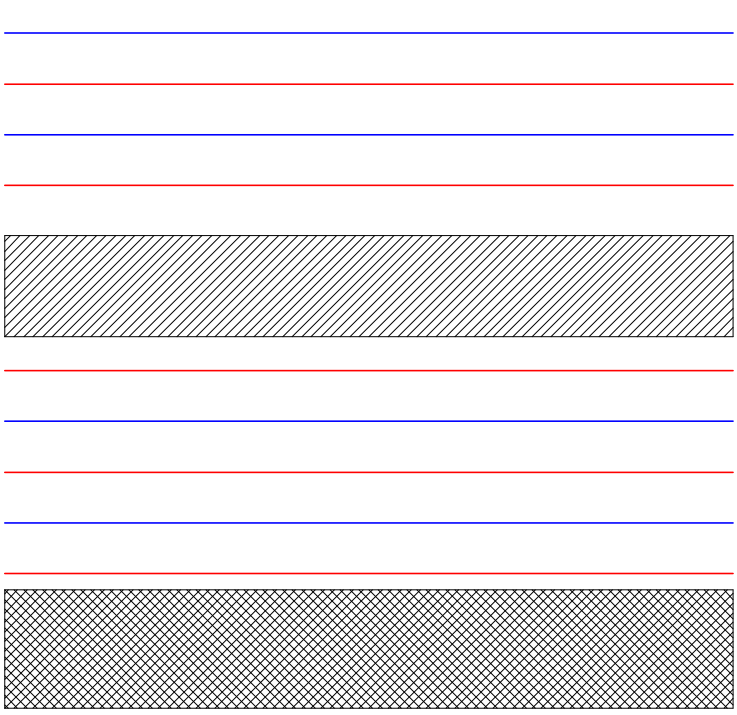
ACRC #: **16-0172 MSELD**

DECK: New [ ] Existing [X]

DECK MATERIAL: Steel [ ] LWC [ ] Concrete [X]

Wood [ ] CWF / Tectum [ ] Gypsum [ ] Other: _____

ROOF COMPONENTS:



Surface: BUR with Gravel
Attachment: Asphalt
Multiple Plies
Attachment: Asphalt
Perlite
Attachment: Asphalt
BUR with Gravel
Attachment: Asphalt
Multiple Plies
Attachment: Asphalt
Deck: Concrete

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GRAPHIC MOISTURE PLOT

ACRC #: **16-0172 MSELD**

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The Graphic Moisture Plot, based on % of moisture by weight, is produced from Calibrated Impedance Readings and spot readings of individual roof components with a Leak Seeker and Visual Observations.

NORTH

	A	B	C	D
1	100	100	100	100
2	100	100	100	100
3	100	100	100	100
4	100	100	100	100
5	100	100	100	100
6	100	2	50	100
7	100	40	40	100
8	100	2	2	100
9	100	2	2	80
10	100	100	100	100
11	70	100	100	100

KEY

 # Impedance Readings (1 is Dry & 100 is Wet)

 # Core Location

Dry - Less than 5% in the membrane or less than 8% in the insulation - Highest acceptable moisture per protocol

Low Moisture, up to 20% Moisture by weight

Medium Moisture, 22% to 50%

High Moisture, over 52%

Grid 10' x 10'
1st reading starts 2' from the perimeter edge

TAS-126

MOISTURE SURVEY

SCOPE

- A non-destructive procedure to test for the presence of moisture in roof system assemblies.
- Subsequence destructive core sampling and laboratory testing performed to determine moisture content by weight and calibrate the Impedance Readings.
- The moisture grid measurements may vary slightly along the building edges and should not be used to determine the exact dimensions of the roof area.
- Moisture contents over 5% in the roofing membrane, and over 8% in the insulation are considered not suitable to roof over, per the Florida Building Code, Section 1521.12.
- This test has been conducted in accordance with TAS-126 of the test protocols for the High velocity Hurricane Zone of the 2014 Florida Building Code.

CONCLUSION

Over 25% of the roof area was found to have unacceptable levels of moisture. Per Section 611.1.1 of the Florida Building Code, High Velocity Hurricane Zone; this roof will need to be removed.

APPROVED LABORATORY ENGINEER

Randall Fowler, P.E.
No. 51156
Engineer

TEST REPORT

ROOF MOISTURE SURVEY

Test Protocol TAS 126-95

Florida Building Code 2014

Date: **April 14, 2016**

ACRC #: **16-0172 MSM**

Pages: **1 - 5**

Report Prepared For:
Advanced Roofing
1950 NW 22nd Street
Ft. Lauderdale, FL

Project Name: **Palm Beach Shores Condo.**

Address: **33 South Beach Shores**

City / State: **Riviera Beach, FL**

Deck: **Main**

TESTING LABORATORY

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CERTIFICATION #15-0224.01

FLORIDA ENGINEERING FIRM
CERTIFICATE OF AUTHORIZATION #9036

TAS 126

BUILDING/ROOF SYSTEM INFORMATION

ACRC #: **16-0172 MSM**

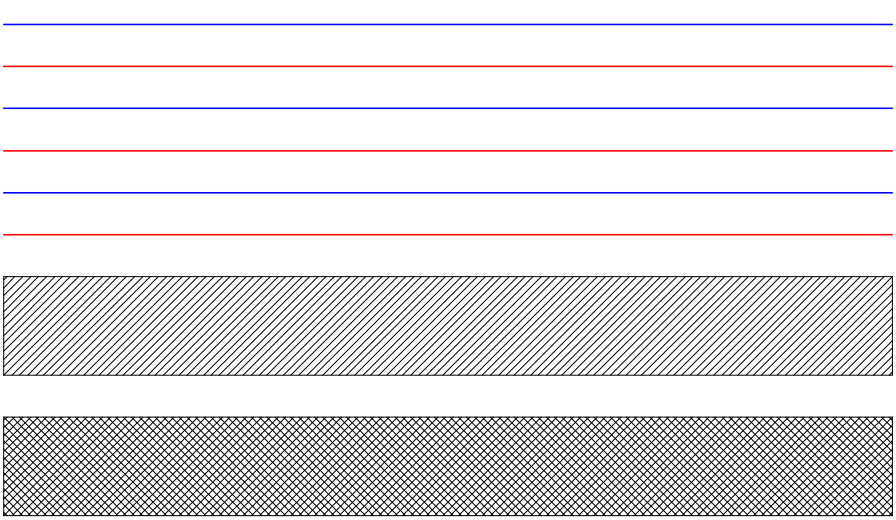
Page: **2**

DECK: New [ ] Existing [X]

DECK MATERIAL: Steel [X] LWC [ ] Concrete [ ]

Wood [ ] CWF / Tectum [ ] Gypsum [ ] Other: _____

ROOF COMPONENTS:



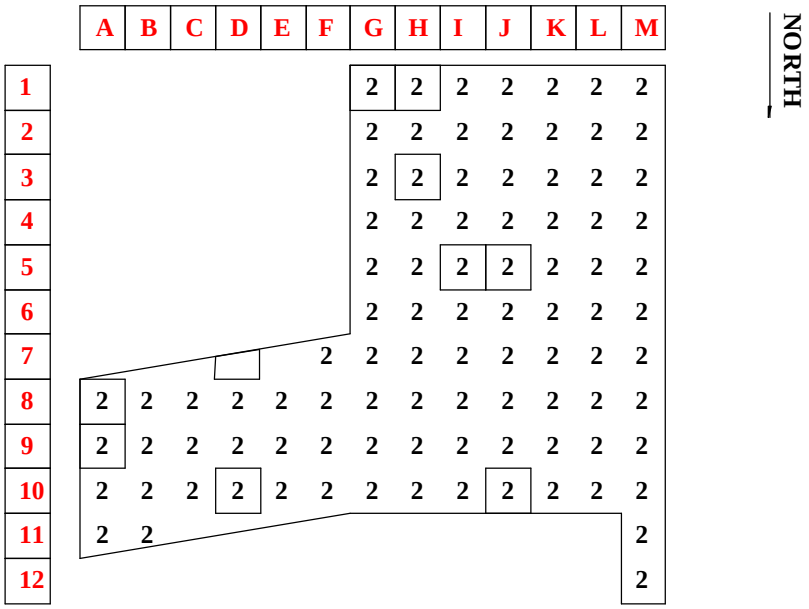
Surface: Granulated BUR
Attachment: Asphalt
Multiple Plies
Attachment: Asphalt
Base Sheet
Attachment: Mechanically Fastened
Tectum
Deck: Steel

TAS-126
GRAPHIC MOISTURE PLOT

ACRC #: **16-0172 MSM**

Page: **3**

The Graphic Moisture Plot, based on % of moisture by weight, is produced from Calibrated Impedance Readings and spot readings of individual roof components with a Leak Seeker and Visual Observations.



KEY

#	**Impedance Readings (1 is Dry & 100 is Wet)**
[#]	**Core Location**
	Dry - Less than 5% in the membrane or less than 8% in the insulation - Highest acceptable moisture per protocol
	Low Moisture, up to 20% Moisture by weight
	Medium Moisture, 22% to 50%
	High Moisture, over 52%

Grid 10' x 10'
1st reading starts 2' from the perimeter edge

TAS-126

MOISTURE SURVEY

SCOPE

- A non-destructive procedure to test for the presence of moisture in roof system assemblies.
- Subsequence destructive core sampling and laboratory testing performed to determine moisture content by weight and calibrate the Impedance Readings.
- The moisture grid measurements may vary slightly along the building edges and should not be used to determine the exact dimensions of the roof area.
- Moisture contents over 5% in the roofing membrane, and over 8% in the insulation are considered not suitable to roof over, per the Florida Building Code, Section 1521.12.
- This test has been conducted in accordance with TAS-126 of the test protocols for the High velocity Hurricane Zone of the 2014 Florida Building Code.

CONCLUSION

The roof is within acceptable moisture ranges and is suitable to re-roof or recover.

APPROVED LABORATORY ENGINEER

Randall Fowler, P.E.
No. 51156
Engineer

TEST REPORT

ROOF MOISTURE SURVEY

Test Protocol TAS 126-95

Florida Building Code 2014

Date: **April 15, 2016**

ACRC #: **16-0172 MSNLD**

Pages: **1 - 5**

Report Prepared For:
Advanced Roofing
1950 NW 22nd Street
Ft. Lauderdale, FL

Project Name: **Palm Beach Shores Condo.**

Address: **33 South Ocean Avenue**

City / State: **Palm Beach Shores, FL**

Deck: **North Lower Deck**

TESTING LABORATORY

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FLORIDA ENGINEERING FIRM
CERTIFICATE OF AUTHORIZATION #9036

TAS 126

BUILDING/ROOF SYSTEM INFORMATION

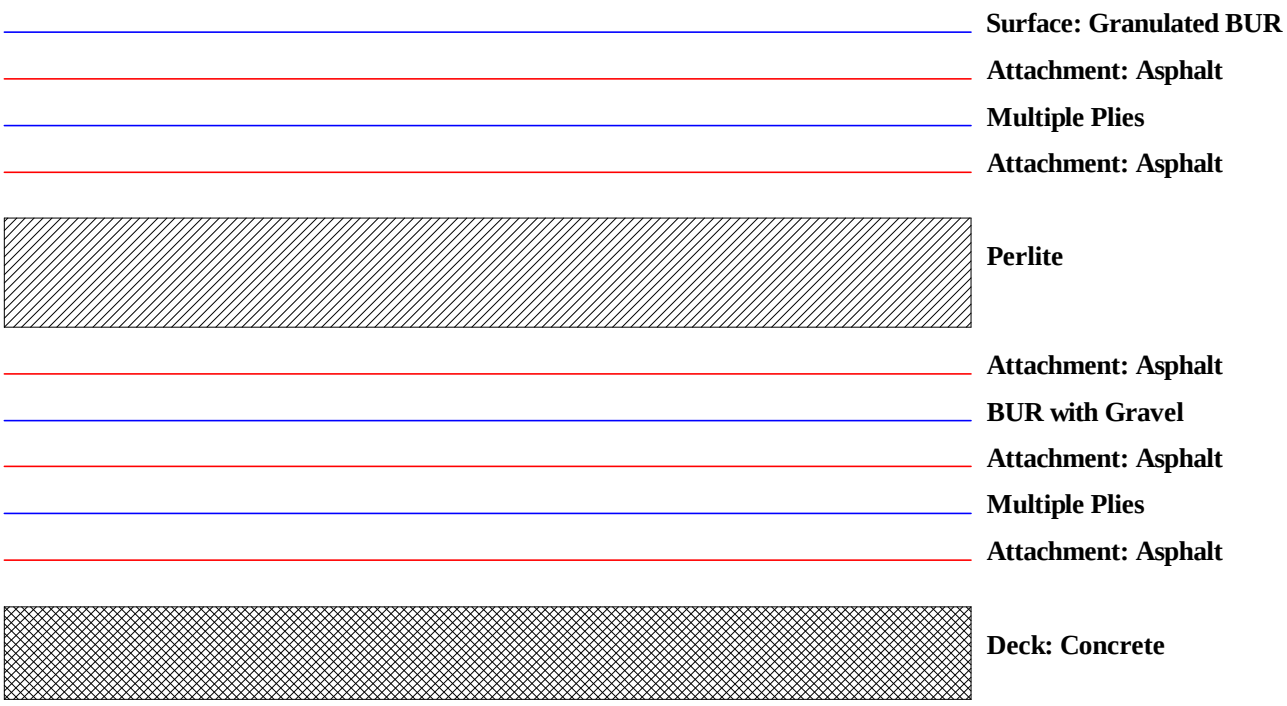
ACRC #: **16-0172 MSNLD**

DECK: New [ ] Existing [X]

DECK MATERIAL: Steel [ ] LWC [ ] Concrete [X]

Wood [ ] CWF / Tectum [ ] Gypsum [ ] Other: _____

ROOF COMPONENTS:



TAS-126
GRAPHIC MOISTURE PLOT

ACRC #: **16-0172 MSNLD**

The Graphic Moisture Plot, based on % of moisture by weight, is produced from Calibrated Impedance Readings and spot readings of individual roof components with a Leak Seeker and Visual Observations.

	A	B	C
1	2		
2	2		
3	2	2	2
4	2	2	2
5	2	2	2
6	2		
7	12		
8	2		

NORTH →

KEY

Impedance Readings
(1 is Dry & 100 is Wet)

Core Location

Dry - Less than 5% in the membrane or less than 8% in the insulation
- Highest acceptable moisture per protocol

Low Moisture, up to 20% Moisture by weight

Medium Moisture, 22% to 50%

High Moisture, over 52%

Grid 5' x 5'
1st reading starts 2' from the perimeter edge

TAS-126

MOISTURE SURVEY

SCOPE

- A non-destructive procedure to test for the presence of moisture in roof system assemblies.
- Subsequence destructive core sampling and laboratory testing performed to determine moisture content by weight and calibrate the Impedance Readings.
- The moisture grid measurements may vary slightly along the building edges and should not be used to determine the exact dimensions of the roof area.
- Moisture contents over 5% in the roofing membrane, and over 8% in the insulation are considered not suitable to roof over, per the Florida Building Code, Section 1521.12.
- This test has been conducted in accordance with TAS-126 of the test protocols for the High velocity Hurricane Zone of the 2014 Florida Building Code.

CONCLUSION

The majority of this roof system is within the acceptable range of moisture content. Small areas, (approximately twenty-five (25) square feet), are in the unacceptable range and will need to be removed.

APPROVED LABORATORY ENGINEER

Randall Fowler, P.E.
No. 51156
Engineer

TEST REPORT

ROOF MOISTURE SURVEY

Test Protocol TAS 126-95

Florida Building Code 2014

Date: **April 18, 2016**

ACRC #: **16-0172 MSWLD**

Pages: **1 - 5**

Report Prepared For:
Advanced Roofing
1950 NW 22nd Street
Ft. Lauderdale, FL

Project Name: **Palm Beach Shores Condo.**

Address: **33 S. Ocean Avenue**

City / State: **Palm Beach Shores, FL**

Deck: **West Lower Deck**

TESTING LABORATORY

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TESTING & ENGINEERING SERVICES

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Oakland Park, Fl 33311

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MIAMI-DADE TESTING LABORATORY
CERTIFICATION #15-0224.01

FLORIDA ENGINEERING FIRM
CERTIFICATE OF AUTHORIZATION #9036

TAS 126

BUILDING/ROOF SYSTEM INFORMATION

ACRC #: **16-0172 MSWLD**

DECK: New [ ] Existing [X]

DECK MATERIAL: Steel [ ] LWC [ ] Concrete [X]

Wood [ ] CWF / Tectum [ ] Gypsum [ ] Other: _____

ROOF COMPONENTS:

TAS-126
GRAPHIC MOISTURE PLOT

ACRC #: **16-0172 MSWLD**

The Graphic Moisture Plot, based on % of moisture by weight, is produced from Calibrated Impedance Readings and spot readings of individual roof components with a Leak Seeker and Visual Observations.

	A	B	C	D
1	2	2	2	2
2	2	2	2	100
3	2	2	2	30
4	26	2	2	2
5	40	50	2	2

NORTH →

KEY

\# **Impedance Readings (1 is Dry & 100 is Wet)**

[#] **Core Location**

Dry - Less than 5% in the membrane or less than 8% in the insulation - Highest acceptable moisture per protocol

Low Moisture, up to 20% Moisture by weight

Medium Moisture, 22% to 50%

High Moisture, over 52%

Grid 10' x 10'
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- Moisture contents over 5% in the roofing membrane, and over 8% in the insulation are considered not suitable to roof over, per the Florida Building Code, Section 1521.12.
- This test has been conducted in accordance with TAS-126 of the test protocols for the High velocity Hurricane Zone of the 2014 Florida Building Code.

CONCLUSION

Twenty Five percent of the roof area (approximately 500 sq. ft.) contains unacceptable levels of moisture trapped within the roof system. Current Code requires the entire roof to be replaced if over 25 % of the roof contains unacceptable levels of moisture.

APPROVED LABORATORY ENGINEER

Randall Fowler, P.E.
No. 51156
Engineer

TEST REPORT

ROOF MOISTURE SURVEY

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Florida Building Code 2014

Date: **April 15, 2016**

ACRC #: **16-0172 MSSLD**

Pages: **1 - 5**

Report Prepared For:
Advanced Roofing
1950 NW 22nd Street
Ft. Lauderdale, FL

Project Name: **Palm Beach Shores Condo.**

Address: **33 S. Ocean Avenue**

City / State: **Palm Beach Shores, FL**

Deck: **South Lower Deck**

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CERTIFICATION #15-0224.01

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CERTIFICATE OF AUTHORIZATION #9036

TAS 126

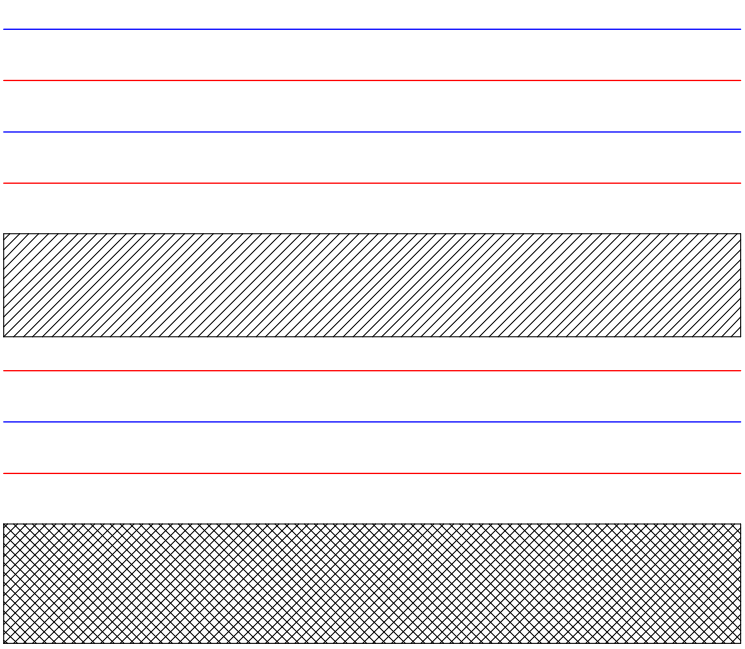
BUILDING/ROOF SYSTEM INFORMATION

DECK: New [ ] Existing [X]

DECK MATERIAL: Steel [ ] LWC [ ] Concrete [X]

Wood [ ] CWF / Tectum [ ] Gypsum [ ] Other: _____

ROOF COMPONENTS:



Surface: BUR with Gravel
Attachment: Asphalt
Multiple Plies
Attachment: Asphalt
Perlite
Attachment: Asphalt
BUR with Gravel
Attachment: Asphalt
Deck: Concrete

TAS-126
GRAPHIC MOISTURE PLOT

ACRC #: **16-0172 MSSLD**

The Graphic Moisture Plot, based on % of moisture by weight, is produced from Calibrated Impedance Readings and spot readings of individual roof components with a Leak Seeker and Visual Observations.

	A	B	C	D	E	F
1	30	2	76	100	100	100
2	30	40	90	80	100	100
3	30	40	82	100	100	100
4	2	Vent	80	100	100	100
5	2	2	100	100	100	100
6	2	90	100	100	100	100
7	2	100	100	100	100	100

NORTH →

KEY

**Impedance Readings (1 is Dry & 100 is Wet)**

**Core Location**

Dry - Less than 5% in the membrane or less than 8% in the insulation - Highest acceptable moisture per protocol

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- This test has been conducted in accordance with TAS-126 of the test protocols for the High velocity Hurricane Zone of the 2014 Florida Building Code.

CONCLUSION

Over 25% of the roof area was found to have unacceptable levels of moisture. Per Section 611.1.1 of the Florida Building Code, High Velocity Hurricane Zone; this roof will need to be removed.

APPROVED LABORATORY ENGINEER

Randall Fowler, P.E.
No. 51156
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